UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

53080

7590

04/07/2010

MCDERMOTT WILL & EMERY LLP 600 13TH STREET, NW WASHINGTON, DC 20005-3096 EXAMINER

RAHLL, JERRY T

ART UNIT PAPER NUMBER

2874

DATE MAILED: 04/07/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577.643	05/01/2006	Naohide Wakita	061352-0128	1745

TITLE OF INVENTION: CONDUCTIVE THIN FILM AND THIN FILM TRANSISTOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/07/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Fee	(s) Transmittal. This	certific	ate cannot be used fo	r domestic mailings of the or any other accompanying nt or formal drawing, must
600 13TH STRE	7590 04/07 Γ WILL & EMER EET, NW I, DC 20005-3096			Certi	ificate o	- f Mailing or Transr	
							(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMATION NO.
10/577,643 TITLE OF INVENTION	05/01/2006 : CONDUCTIVE THIN	FILM AND THIN FILM	Naohide Wakita TRANSISTOR		06	51352-0128	1745
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	07/07/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]			
RAHLL,	JERRY T	2874	349-043000	,			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A PLEASE NOTE: Unl	ondence address (or Cha B/122) attached. ication (or "Fee Address')2 or more recent) attach ND RESIDENCE DATA less an assignee is identi	nge of Correspondence 'Indication form ed. Use of a Customer A TO BE PRINTED ON Third iffied below, no assignee	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or type data will appear on the p T a substitute for filing an	o 3 registered patent vely, e firm (having as a agent) and the name rneys or agents. If n printed.	member s of up to name	a 2 to is 3	ocument has been filed for
	iate assignee category or	4b	b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit car	Individual	rporation y previo	n or other private grously paid issue fee s	up entity Government shown above) Ciciency, or credit any a extra copy of this form).
NOTE: The Issue Fee and	s SMALL ENTITY statu d Publication Fee (if requ	is. See 37 CFR 1.27.	b. Applicant is no lond from anyone other than to Office.				FR 1.27(g)(2). e assignee or other party in
•				Date			
Typed or printed name							
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but 7 riginia 22313-1450. DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the NOT SEND FEES OR (on is required to obtain or a 1.14. This collection is est depending upon the indivention office COMPLETED FORMS TO	retain a benefit by th timated to take 12 m ridual case. Any cor er, U.S. Patent and T O THIS ADDRESS.	e public ninutes to nments of Trademan SEND	which is to file (and o complete, including on the amount of tin rk Office, U.S. Depa TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/577,643	05/01/2006	Naohide Wakita	061352-0128	1745	
53080 7590 04/07/2010			EXAMINER		
MCDERMOTT V	WILL & EMERY LI	RAHLL, JERRY T			
600 13TH STREET, NW			ART UNIT	PAPER NUMBER	
WASHINGTON, DC 20005-3096			2874		
			DATE MAIL ED: 04/07/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 822 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 822 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	_
Notice of Allowability	10/577,643 Examiner	WAKITA, NAOHIDE Art Unit	_
•			
	JERRY T. RAHLL	2874	_
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED i or other appropriate comm IGHTS. This application is	n this application. If not included unication will be mailed in due course. THIS	÷
1. 🔀 This communication is responsive to Applicant's response	received 30 October 2009.		
2. \boxtimes The allowed claim(s) is/are $\underline{66-79,85-98,100,101,103,104}$	106,107,109 and 110.		
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 		or (f).	
2. Certified copies of the priority documents have	been received in Application	on No	
3. Copies of the certified copies of the priority do	cuments have been receive	d in this national stage application from the	
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) \square including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)	5. ☐ Notice of Ir	oformal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		ummary (PTO-413),	
	Paper No.	/Mail Date	
3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 5/1/06;12/8/09	/. ⊠ Examiner's	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's	Statement of Reasons for Allowance	
	9.	<u></u>	
/Jerry T Rahll/			
Primary Examiner, Art Unit 2874			

Application/Control Number: 10/577,643 Page 2

Art Unit: 2874

EXAMINER'S AMENDMENT

1. This application is in condition for allowance except for the presence of claims 61-65, 80-84, 99, 102, 105, and 108 are drawn to inventions non-elected without traverse. Accordingly, claims 61-65, 80-84, 99, 102, 105, and 108 have been cancelled (see below).

- 2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
- 3. The application has been amended as follows: Claims 61-65, 80-84, 99, 102, 105, and 108 are canceled.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

- 4. The following is an examiner's statement of reasons for allowance. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 5. Claims 66-79, 85-98, 100, 101, 103, 104, 106, 107, 109, and 110 are allowed.
- 6. Independent Claims 66, 75, 85, and 94 describe at least a conductive thin film formed by mixing a non-liquid-crystal organic semiconductor compound and a non-liquid-crystal organic compound to form a liquid crystalline organic semiconductor mixture and orienting molecules of the crystalline organic semiconductor mixture and methods of forming the conductive thin film.

Application/Control Number: 10/577,643 Page 3

Art Unit: 2874

7. US Patent No. 6,326,640 to Shi et al. describes a conductive thin film formed by mixing a non-liquid-crystal organic semiconductor compound and a non-liquid-crystal organic compound (see Col 2 Lns 30-40 and Col 2 Ln 55-Col 3 Ln 5) to form an organic semiconductor mixture and orienting molecules (see Col 3 Lns 15-35 and Col 4 Lns 20-30) of the crystalline organic semiconductor mixture and methods of forming such a conductive thin film. Shi does not describe the formed organic semiconductor mixture as liquid crystalline.

8. US Patent No. 6,326,640 to Shi et al. remains the closest prior art of record in this application. For the reasons stated above, however, Claims 66-79, 85-98, 100, 101, 103, 104, 106, 107, 109, and 110 herein are deemed to patentably distinguish over US Patent No. 6,326,640 to Shi et al. and all other prior art of record.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRY T. RAHLL whose telephone number is (571)272-2356. The examiner can normally be reached on M, W-Sa (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Uyen-Chau Le can be reached on 571-272-2397. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/577,643 Page 4

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jerry T Rahll/ Primary Examiner, Art Unit 2874